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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/761,667	Applicant(s) DONG ET AL.	
	Examiner DAVID P. RASHID	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-10,12-15,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-10,12-15 and 17 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

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Amendments & Claim Status

[1] This office action is responsive to Amendment and Response to Non-Final Office Action received on Jan 6, 2009. Claims 1, 3-5, 7-10, 12-15, and 17-18 remain pending; claims 19-20 cancelled.

Response to Arguments

[2] Applicant's Remarks filed Jan. 6, 2009 with respect to claims 1, 8 and 13 have been respectfully and fully considered, but are not found persuasive.

Summary of Remarks regarding Rejections under 35. U.S.C. § 102(b)

Kado does not change the orientation of his structure model with respect to a viewpoint from which a two-dimensional image is rendered. In other words, he does not change the orientation of his structure model with respect to the camera viewpoint. Rather, Kado changes the direction from which the illumination comes while leaving the camera viewpoint unchanged.

The Examiner states that Kado's change in "light reflectance off the three-dimensional facial image is an adjustment in orientation with respect to the light" and he appears to be arguing that is the same as a change in orientation with respect to viewpoint. But that is not correct. Illumination direction is not the same as camera viewpoint. And changing illumination direction does not mean that camera viewpoint was changed. Indeed, illumination direction and camera viewpoint are two different and independent parameters. One can change the illumination direction and admittedly that is equivalent to changing the orientation of the object with respect to the illumination

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direction. But changing the orientation of the object with respect to the illumination direction is not the same as changing the camera viewpoint.

Remarks at 6-7.

However, interpreting "light reflectance off the three-dimensional facial image is an adjustment in orientation with respect to the light" is the same as a change in orientation with respect to viewpoint by the Examiner is incorrect. As agreed with the Applicant, the "viewpoint" used in fig. 11 is the same throughout all steps, and further independent to changing orientation.

The two dimensional facial image captured can be said to have been captured from a "face forward" viewpoint (i.e., a viewpoint from which the face is looking straight ahead, a "vertically symmetric facial viewpoint"), the same viewpoint taken by the camera. The fig. 11 algorithm of *Kado et al.* uses this viewpoint throughout all steps and this viewpoint does not change (i.e., the face forward viewpoint of the received image, the modified three dimensional facial image, the orientation adjusted three dimensional facial image, and two dimensional output image from the adjusted three-dimensional facial image).

Though "orientation" of the adjusted structure model alters after a change in light reflectance, the "face forward" viewpoint remains the same (and more broadly "with respect to said viewpoint"). Additionally, rendering a two dimensional image ("Results" at fig. 11) from the adjusted three-dimensional facial image after light reflectance alteration (a change in orientation) again uses the same viewpoint (and more broadly "with respect to said viewpoint").

So, Kado uses an approach that is less sensitive to slight changes in the angle of the face and thus does not require changes in orientation with respect to the camera viewpoint.

...

Thus, Kado's method does not accommodate large changes in the angle of the face at photographing time and it does not involve changes in orientation of the structure model relative to a viewpoint from which a 2D image is obtained (i.e., a camera viewpoint).

Remarks at 7.

However, though accommodating slight changes in the angle of the face at the photographing time and not large changes in the angle of the face at photographing time is unpersuasive as the claim language does not call a definite degree by which the changes are

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made. *Kado et al.* does disclose changing the orientation (light reflectance with respect to the light source) relative to a universal “face forward” viewpoint, the same viewpoint taken by the camera as argued above.

Claim Rejections - 35 U.S.C. § 101

[3] 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

In Re Bilski – “Tied To” Criteria and/or Qualifying “Transformation”

Claims 1, 3-5, 7, 8-10, and 12 are rejected under 35 U.S.C. § 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory “process” under 35 U.S.C. § 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

A process must have either a meaningful tie to an “apparatus”, or “machine”, or the process must perform a qualifying transformation. With regard to (1) above, insignificant pre- or post-solution activity involving an “apparatus”, or “machine” is not a meaningful tie. Claims 1 and 8 do not recite such pre- or post-solution activity to be considered. In addition, the machine required must be significant to the inventive concept (and not pre- or -post processing, or intended use statements as recited immediately above). When such machine is introduced and significant to the inventive concept, it must be a particular machine (e.g., a “processor”, not a “machine”). Claims 1 and 8 do not recite any machine for it to be considered a “particular”

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

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machine. "[R]eceiving a two dimensional image" does not recite a particular machine from which it was received, and such a particular machine would be regarded pre-solution activity.

With regard to (2) above, the pixels in the image do not represent a physical object, nor is there any modification with external depiction separate from any insignificant pre- or post-solution activity, or intended use statements as recited immediately above. Capturing a facial image from a viewpoint is not positively recited as the method-step is positively directed to only receiving a two-dimensional image. Claim 8 rejected by analogy. Claims 3-5, 7, 9-10, and 12 are rejected for failing to alleviate their dependent claim.

Claim Rejections - 35 U.S.C. § 102

[4] The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Kado et al.

[5] **Claim 1** is rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,995,639 (issued Nov. 30, 1999, hereinafter "Kado et al.").

Regarding **claim 1**, *Kado et al.* discloses a method of processing an image of a face, the method comprising (fig. 1; fig. 14; fig. 11 with "Brightness Correction", 7:23-52) the steps of:

receiving a two dimensional facial image (fig. 14, item 2; "Input image" in fig. 11), the facial image having been captured from a viewpoint (fig. 14, item 2 and "Input image" in fig. 11 are both captured from a viewpoint; the "face forward" viewpoint);

combining the two dimensional facial image and a standard three dimensional facial image (fig. 14, item 14; "Standard structure model" in fig. 11) to create a modified three dimensional facial image (fig. 14, item 16; "Adjusted structure mode" in fig. 11 before brightness correction step 19 in fig. 14; both having been modified);

adjusting an orientation of the modified three dimensional facial image (fig. 14, item 19 wherein the changing of the "orientation" is brightness correction as detailed in 7:23-52, the change is light reflectance off the three-dimensional facial image is an adjustment in orientation with respect to the light) with respect to said viewpoint (the "face forward" viewpoint); and

with respect to said viewpoint (the "face forward" viewpoint), rendering a two dimensional image ("Results" at fig. 11) from the adjusted three-dimensional image.

Claim Rejections - 35 U.S.C. § 103

[6] The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Kado et al. in view of Toyama et al.

[7] **Claim 3** is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kado et al.* in view of U.S. Pub. No. 2002/0013684 (published Jan. 31, 2002, hereinafter "Toyama et al.").

Regarding **claim 3**, while *Kado et al.* discloses the method of claim 1, *Kado et al.* does not teach wherein the standard three dimensional facial image is generated by receiving a plurality of three dimensional facial images and combining the plurality of three dimensional facial images to generate the standard three dimensional facial image.

Toyama et al. discloses a method for modifying a standard model (fig. 1; fig. 11) wherein the standard three dimensional facial image (fig. 11, items 37, 38) is generated by receiving a plurality of three dimensional facial images and combining the plurality of three dimensional facial images to generate the standard three dimensional facial image (fig. 11, items 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the step of creating a standard three dimensional facial image of *Kado et al.* to be generated by receiving a plurality of three dimensional facial images and combining the plurality of three dimensional facial images to generate the standard three dimensional facial image as taught by *Toyama et al.* "...to provide a method for generating a shape model that enables to have a part of a three-dimensional model such as a corner of an eye or a corner of an eye or a corner of a mouth conformed to that of an object without topical improper modification.", *Toyama et al.*, paragraph [0016].

Kado et al. in view of Cumbers

[8] Claims 8-10, 13-15 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination between *Kado et al.* in view of U.S. Patent No. 6,142,876 (issued Nov. 7, 2000; hereinafter "Cumbers").

Regarding **claim 8**, while *Kado et al.* discloses a facial identification method (fig. 1; fig. 14; fig. 11 with "Brightness Correction", 7:23-52) comprising:

receiving a two dimensional facial image (fig. 14, item 2; "Input image" in fig. 11), the facial image having been captured from a viewpoint (fig. 14, item 2 and "Input image" in fig. 11 are both captured from a viewpoint; the "face forward" viewpoint);

creating a three dimensional facial image (fig. 14, item 16; "Adjusted structure mode" in fig. 11 before brightness correction step 19 in fig. 14) from the two dimensional facial image;

adjusting an orientation of the three dimensional facial image (fig. 14, item 19 wherein the changing of the "orientation" is brightness correction as detailed in 7:23-52, the change is light reflectance off the three-dimensional facial image is an adjustment in orientation with respect to the light) with respect to said viewpoint (the "face forward" viewpoint); and

with respect to said viewpoint (the "face forward" viewpoint), rendering an adjusted two dimensional facial image ("Results" at fig. 11) from the adjusted three dimensional facial image (fig. 14, item 19 wherein the changing of the "orientation" is brightness correction as detailed in 7:23-52, the change is light reflectance off the three-dimensional facial image is an adjustment in orientation with respect to the light),

Kado et al. does not teach comparing the rendered adjusted two dimensional facial image to at least one stored two dimensional facial image to determine a match.

Cumbers teaches comparing a two dimensional facial image (fig. 1, item 24) to at least one stored two dimensional facial image (e.g., item 46a in item 44 at fig. 1) to determine a match.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the rendered adjusted two dimensional facial image of *Kado et al.* to be compared with at least one stored two dimensional facial image to determine a match as taught by *Cumbers* “to obtain the objects set forth above and others by providing a player tracking system which includes passive player identification, which can allocate previously accumulated data to a newly identified player and which can assist in spotting suspicious individuals or suspected cheats and which overcomes the problems and drawbacks set forth above.” *Cumbers* at 2:54-61.

Regarding **claim 9**, *Kado et al.* in view of *Cumbers* does not teach wherein the comparing step includes: comparing the rendered two dimensional image to a plurality of stored two dimensional facial images to determine a closest match.

Cumbers teaches comparing a two dimensional facial image (fig. 1, item 24) to a plurality of stored two dimensional facial images (e.g., items 46a, 46b, 46c in item 44 at fig. 1) to determine a match.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the rendered adjusted two dimensional facial image of *Kado et al.* to be compared to a plurality of stored two dimensional facial images to determine a closest match as taught by *Cumbers* “to obtain the objects set forth above and others by providing a player tracking system which includes passive player identification, which can allocate previously accumulated data to a newly identified player and which can assist in spotting suspicious individuals or suspected cheats and which overcomes the problems and drawbacks set forth above.” *Cumbers* at 2:54-61.

Regarding **claim 10**, *Kado et al.* discloses the facial identification method of claim 8, wherein the step of creating a three dimensional facial image (fig. 14, item 16; “Adjusted structure mode” in fig. 11 before brightness correction step 19 in fig. 14) includes the step of combining the two dimensional facial image (fig. 14, item 2; “Input image” in fig. 11) and a

modified standard three dimensional facial image (fig. 14, item 14; "Standard structure model" in fig. 11) to create a three dimensional facial image.

Regarding **claim 13**, while *Kado et al.* discloses a system for an identifying an individual (fig. 1; fig. 14; fig. 11 with "Brightness Correction", 7:23-52), said system comprising:

a camera (fig. 1, items 1, 2) for acquiring a two dimensional facial image (fig. 14, item 2; "Input image" in fig. 11) of a person's head from a viewpoint (the "face forward" viewpoint) relative to the person's head;

means for creating a three dimensional facial image (fig. 14, item 16; "Adjusted structure mode" in fig. 11 before brightness correction step 19 in fig. 14) from the two dimensional facial image with respect to a viewpoint of the camera (fig. 14, item 2 and "Input image" in fig. 11 are both captured from a viewpoint);

means for adjusting an orientation of the three dimensional facial image (fig. 14, item 19 wherein the changing of the "orientation" is brightness correction as detailed in 7:23-52, the change is light reflectance off the three-dimensional facial image is an adjustment in orientation with respect to the light) with respect to said viewpoint (the orientation adjustment occurred using the original facial image viewpoint); and

means for rendering with respect to said viewpoint (the "face forward" viewpoint) a final two dimensional image ("Results" at fig. 11) from the adjusted three dimensional image; *Kado et al.* does not disclose means for comparing the final two dimensional image to at least one stored two dimensional image to determine a match .

The means-plus-function language supports computer/software interaction (fig. 1 of the present application) and is fully anticipated by the computer/software interaction as disclosed by *Kado* (fig. 1).

Cumbers teaches means for (fig. 1, item 14) comparing a two dimensional facial image (fig. 1, item 24) to at least one stored two dimensional facial image (e.g., item 46a in item 44 at fig. 1) to determine a match.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the final two dimensional facial image of *Kado et al.* to be compared with at least one stored two dimensional facial image to determine a match as taught by *Cumbers* "to obtain the objects set forth above and others by providing a player tracking system which includes

passive player identification, which can allocate previously accumulated data to a newly identified player and which can assist in spotting suspicious individuals or suspected cheats and which overcomes the problems and drawbacks set forth above.” *Cumbers* at 2:54-61.

Regarding **claim 14**, *Kado et al.* in view of *Cumbers* does not disclose the system for identifying an individual according to claim 13, further comprising: a database of stored two dimensional images; and wherein the means for comparing includes means for comparing the final two dimensional image to at least one stored two dimensional image in the database of stored two dimensional images.

Cumbers teaches comprising: a database (fig. 1, item 44) of stored two dimensional images (e.g., items 46a, 46b, 46c in item 44 at fig. 1); and wherein means for (fig. 1, item 14) comparing includes means for (fig. 1, item 14) comparing a two dimensional image (fig. 1, item 24) to at least one stored two dimensional image (e.g., item 46a in item 44 at fig. 1) in the database of stored two dimensional images (fig. 1, item 44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the final two dimensional facial image of *Kado et al.* to be compared with at least one stored two dimensional facial image in a database of stored two dimensional images as taught by *Cumbers* “to obtain the objects set forth above and others by providing a player tracking system which includes passive player identification, which can allocate previously accumulated data to a newly identified player and which can assist in spotting suspicious individuals or suspected cheats and which overcomes the problems and drawbacks set forth above.” *Cumbers* at 2:54-61.

Regarding **claim 15**, *Kado et al.* in view of *Cumbers* does not disclose wherein the means for comparing includes means for comparing the final two dimensional image to a plurality of stored two dimensional images in the database to determine a closest match.

Cumbers teaches wherein the means for (fig. 1, item 14) comparing includes means for (fig. 1, item 14) comparing the two dimensional image (fig. 1, item 24) to a plurality of stored two dimensional images (e.g., items 46a, 46b, 46c in item 44 at fig. 1) in the database (fig. 1, item 44) to determine a closest match.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the final two dimensional facial image of *Kado et al.* to be compared to a plurality

of stored two dimensional images in the database to determine a closest match as taught by *Cumbers* “to obtain the objects set forth above and others by providing a player tracking system which includes passive player identification, which can allocate previously accumulated data to a newly identified player and which can assist in spotting suspicious individuals or suspected cheats and which overcomes the problems and drawbacks set forth above.” *Cumbers* at 2:54-61.

Regarding **claim 17**, *Kado et al.* discloses wherein the means for rendering includes means for rendering the final two dimensional facial image based upon a selected lighting (brightness correction as detailed in 7:23-52).

The means-plus-function language supports computer/software interaction (fig. 1 of the present application) and is fully anticipated by the computer/software interaction as disclosed by *Kado* (fig. 1).

Kado et al. in view of Cumbers and Toyama et al.

[9] **Claim 12** is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kado et al.* in view of *Cumbers* and *Toyama et al.*

Regarding **claim 12**, claim 3 recites identical features as in claim 12. Thus, references/arguments equivalent to those presented above for claim 3 are equally applicable to claim 12.

Allowable Subject Matter

[10] **Claims 4-5** and **7** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

[11] **Claim 18** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claim 18** (and claim 4 by analogy), while the prior art of record discloses the means for creating a three dimensional facial image, the prior art of record does not disclose such that the means for creating a three dimensional facial image include means for combining the

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two dimensional facial image with a standard three dimensional facial image to create an intermediate three dimensional facial image; and means for rendering an intermediate two dimensional facial image from the intermediate three dimensional facial image; means for comparing the intermediate two dimensional facial image to the two dimensional facial image; and means for adjusting the intermediate three dimensional facial image based upon results of the comparison of the intermediate two dimensional facial image to the two dimensional facial image.

Conclusion

Citation of Pertinent Prior Art

[12] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 6606096 B2.

[13] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

[14] Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID P. RASHID whose telephone number is (571)270-1578 and fax number (571)270-2578. The examiner can normally be reached Monday - Friday 7:30 - 17:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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